Supreme Court, U.S.
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No. 06-109

In The
Supreme Court of the United States

WESLEY SMITH,

Petitioner,

v.

BROOKSHIRE BROTHERS, INC.,

Respondent.

On Petition For Writ Of Certiorari To The Court Of Appeals Of Texas, First Judicial District

PETITION FOR WRIT OF CERTIORARI

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QUESTIONS PRESENTED

Question One

Does the court of appeals' holding that Material Safety Data Sheets (MSDS) are not scientifically reliable conflict with federal statutes requiring such reliability and mandating reliance by certain designated persons?

Question Two

Does the court of appeals' conclusion that federally mandated MSDS and warning labels are not scientifically reliable evidence of causation undermine the use of MSDS by emergency responders and others who are required by law to rely on their scientific reliability and subject those persons to potential third-party liability?

Question Three

Does the court of appeals' conclusion that federally mandated MSDS are not scientifically reliable evidence of causation violate public policy?

PARTIES

Petitioner is Wesley Smith, Individually.

Respondent is Brookshire Brothers, Incorporated.

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PETITION FOR WRIT OF CERTIORARI

This is a chemical-exposure case. Wesley Smith filed this personal-injury lawsuit against his employer, Brookshire Brothers, Incorporated to recover damages for injuries he undisputedly sustained while on the job. While employed at Brookshire, Smith, a sixteen-year old boy at the time, was exposed to a combination of several known toxic chemicals at the direction of his immediate supervisor. The supervisor forced Smith to continue working without the benefit of protective equipment and consciously disregarded Smith's request for protective equipment. As a result of Brookshire's conduct, Smith suffered permanent respiratory injury. After a four-day trial, the jury returned a verdict in favor of Smith, concluding Brookshire's "negligence" and/or "failure to provide Smith a reasonably safe work place . . . proximately caused" his injuries. The jury also found clear and convincing evidence that the harm to Smith resulted from malice. Ultimately, the trial court entered a final judgment that awarded $46,000 in compensatory damages, $200,000 in punitive damages, $27,165.90 in prejudgment interest, and post-judgment interest on all damages at ten percent (10%) per annum until paid. Brookshire Brothers appealed the decision. The court of appeals rendered a take-nothing verdict because it ruled the evidence relied upon by Smith's expert witness, the federally mandated Material Safety Data Sheets for the specific products involved, were not scientifically reliable.

OPINIONS AND ORDERS BELOW

The Texas Supreme Court denied discretionary review in this case (App. C, *infra*) and its order is unpublished.

The opinion of the Court of Appeals for the First Judicial District (App. A) is reported at 176 S.W.3d 30. The Judgment of the 411th Judicial District Court, Trinity County, Texas is unpublished (App. B, *infra*).

JURISDICTION

The Texas Supreme Court denied discretionary review in this case. The Judgment of the Court of Appeals for the First Judicial District in Houston, Texas is that of the highest court possessing and exercising jurisdiction. (App. A, *infra*). This Court's jurisdiction rests on 28 U.S.C. §1257(a).

FEDERAL STATUTES AND REGULATIONS INVOLVED

The relevant provisions of the United States Code and Code of Federal Regulations are set forth below:

The Occupational Safety and Health Act of 1970 (OSHA), 84 Stat. 1590, 29 U.S.C. §651 et seq. (1982 ed.), authorizes the Department of Labor (DOL) to set health and safety standards for workplaces.

The Department of Labor promulgated a hazard communication standard requiring that the best, peer-reviewed scientific literature from the Material Data Safety Sheets. 29 C.F.R. §1910.1200 et seq. (1989).

STATEMENT OF THE CASE

The court of appeals' decision about the scientific reliability of federally mandated Material Safety Data Sheets ("MSDS") so greatly impacts the safety and welfare of the general public that this Court should grant petitioner's Writ of Certiorari in this case. The court of appeals' holding that federally mandated MSDS are not scientifically reliable is not only clearly erroneous, but it also now subjects health-care providers, emergency first responders and others to third-party liability for relying on MSDS when they are actually required by training and statute to rely on MSDS for diagnosis and treatment purposes. This is a jurisdictionally significant case presenting the Court for the first time the opportunity to address the scientific reliability of federally mandated MSDS and resolve the conflict between state and federal law created by the court of appeals' opinion, and correct the court of appeals' erroneous conclusion that MSDS are not scientifically reliable.

The court of appeals' holding that MSDS are not scientifically reliable simply defies logic, given the specific federal regulations that require manufacturers to reveal known risks and hazards and require that MSDS be scientifically reliable, and the information provided on the MSDS be based on established, peer-reviewed scientific literature. Clearly, this case presents issues of vital importance not only to the jurisprudence of the nation but to all those health-care providers, first-responders, and others, such as employers, employees, and transporter of hazardous chemicals, who are required by federal and state law to rely on the scientific reliability of MSDS. Attached as Exhibit G are just a few examples of those persons who

will be materially and negatively impacted by the court of appeals' erroneous opinion.

REASONS FOR GRANTING THE PETITION

The jurisdictional impact of this case is clearly significant, and it is important that this Court speak on the issue of the scientific reliability of Material Safety Data Sheets (MSDS), resolve the conflict created by the court of appeals' opinion, and correct the court's erroneous conclusion that MSDS are not scientifically reliable. The court of appeals' holding that MSDS are not scientifically reliable if left uncorrected will expose all those required by federal and state law to rely on the scientific reliability of MSDS to liability for acting consistently with federal law. Specifically, this Court should grant certiorari for the following reasons:

A. The court of appeals' holding that federally mandated MSDS is no evidence that the particular hazardous chemical can generally cause the injury specifically identified in the MSDS is contrary to and conflicts with federal regulations requiring the MSDS to be scientifically reliable and accurate.

The court of appeals' opinion holds that MSDS, which are federally mandated of every manufacturer and importer of hazardous chemicals, is no evidence that the particular hazardous chemical can generally cause the injury identified in the MSDS. The opinion is contrary to and conflicts with federal regulations that require that all MSDS be scientifically reliable and accurate. *Brookshire*

Brothers, Inc. v. Smith, 176 S.W.3d 30, 38 (Tex. App. – Houston [1st Dist.] 2004, pet. denied). In this case, the court of appeals held an evidentiary void existed and was caused by the lack of a specific, detailed showing of scientific reliability. The court held the evidentiary void could be remedied only by an established, scientific connection between the commercial cleaners and RADS (the injury sustained by petitioner). *Id.* This is precisely what the MSDS was designed to provide and did provide in this case.

Appendix B to 29 C.F.R. §1910.1200 mandates the standards to which the MSDS should adhere. Appendix B reads in pertinent part:

> The quality of a hazard communication program is largely dependent upon the adequacy and accuracy of the hazard determination. . . . Chemical manufacturers, importers, and employers evaluating chemicals are not required to follow any specific methods for determining hazards, but they ***must be able to demonstrate that they have adequately ascertained the hazards of the chemicals produced or imported*** in accordance with the criteria set forth in this Appendix.
>
> Hazard evaluation is a process which relies heavily on the professional judgment of the evaluator, particularly in the area of chronic hazards. The performance-orientation of the hazard determination does not diminish the duty of the chemical manufacturer, importer or employer to ***conduct a thorough evaluation, examining all relevant data and producing a scientifically defensible evaluation***. For purposes of this standard, the following criteria shall be used in making hazard determinations that meet the requirements of this standard.

1. Carcinogenicity: As described in paragraph (d)(4) of this section and Appendix A of this section, a determination by the National Toxicology Program, the International Agency for Research on Cancer, or OSHA that a chemical is a carcinogen or potential carcinogen will be considered conclusive evidence for purposes of this section. In addition, however, ***all available scientific data on carcinogenicity must be evaluated*** in accordance with the provisions of this Appendix and the requirements of the rule.

2. Human data: ***Where available, epidemiological studies and case reports of adverse health effects shall be considered in the evaluation.***

3. Animal data: Human evidence of health effects in exposed populations is generally not available for the majority of chemicals produced or used in the workplace. Therefore, ***the available results of toxicological testing in animal populations shall be used*** to predict the health effects that may be experienced by exposed workers. In particular, the definitions of certain acute hazards refer to specific animal testing results (see Appendix A).

4. Adequacy and reporting of data. ***The results*** of any studies which are designed and conducted according to established scientific principles, and which report statistically significant conclusions regarding the health effects of a chemical, ***shall be*** a sufficient basis for a hazard determination and ***reported on any material safety data sheet***. In vitro studies alone generally do not form the basis for a definitive finding of hazard under the HCS since they have a positive or

> negative result rather than a statistically significant finding.

29 C.F.R. §1910.1200 App. D (emphasis added).

The court of appeals' conclusion that MSDS are not scientifically reliable is directly in conflict with federal regulations which specifically require that the information provided on the MSDS be scientifically reliable. As detailed above, manufacturers and importers of hazardous chemicals are, as a matter of law, required to research the best, peer-reviewed scientific literature to form the MSDS. 29 C.F.R. §1910.1200(g)(5). See e.g. *Curtis v. M&S Petroleum*, 174 F.3d 661 (5th Cir. 1999); *Westberry v. Gislared Gummi AB.*, 178 F.3d 257, 265 (4th Cir. 1999); *McCullock v. H.B. Fuller Co.*, 61 F.3d 1038, 1043-44 (2nd Cir. 1995). Should the court of appeals' decision be allowed to stand, it will render these federal regulations requiring the MSDS to be scientifically reliable, completely meaningless, and puts the jurisprudence of the State of Texas in direct conflict with federal law.

The court of appeals' holding that epidemiological studies are required defies common sense when discussing known hazardous chemicals. The federal government's regulation and enforcement of the MSDS ensures the scientific reliability of the MSDS. It makes absolutely no sense to expose existing populations to known toxins when the federal government requires manufacturers and importers of hazardous chemicals to prepare the MSDS and warning labels with "all the information regarding health and environmental hazards, analyze the chemistry of hazardous chemicals, assess the hazard, provide hazard warning information, and identify potential injury." 29 C.F.R. §1910.1200 (1998). All manufacturers of hazardous

chemicals must make a health hazard determination that includes a mandatory requirement to consider "when available, epidemiological studies and case reports of adverse health effects" when forming a MSDS. 29 C.F.R. §1910.1200, App. B.

Finally, the court of appeals erroneously relies on the Fifth Circuit's opinion in *Moore v. Ashland.* In *Moore,* the Fifth Circuit after finding the expert offered ***no*** scientific support for his general theory that exposure to Toluene solution at any level would cause RADS, the Court stated:

> Given the paucity of facts Dr. Jenkins had available about the level of Moore's exposure to the Toluene solution, his causation opinion would have been suspect even if he had scientific support for the position that the Toluene solution could cause RADS in a worker exposed to some minor level of the solution. Under *Daubert*, any step that renders the analysis unreliable . . . renders the expert's testimony inadmissible. This is true whether the step completely changes a reliable methodology or merely misapplies that methodology. *See In re Paoli R.R. Yard PCB Litigation,* 35 F.3d 717, 745 (3d Cir. 1994) (emphasis in original).

Moore v. Ashland, 151 F.3d 269, 279 n. 10 (5th Cir. 1998).

In this case, there is simply no dispute that the methodology is reliable, and that the methodology was applied correctly.

B. The court of appeals' holding that MSDS are not scientifically reliable will expose all those required by federal law to rely on the scientific reliability of MSDS to liability for acting consistently with federal law.

The court of appeals' decision is not only directly in conflict with federal law, but jeopardizes the ability of health-care providers and other emergency responders to make speedy and informed decisions about how to treat those who are exposed to hazardous chemicals. The court of appeals' opinion also negatively affects the decisions of those required to rely on MSDS in the handling and transporting of hazardous chemicals. Persons handling and transporting hazardous chemicals are now at an increased risk of third-party liability for reliance on MSDS. Federal and state law require employers, employees, practicing physicians, toxicologists, emergency room doctors, hazardous materials teams and other health care providers to rely on MSDS and warning labels prepared by the manufacturer. 29 C.F.R. §1910.1200 (1989). They do so because the manufacturer is required by the federal law to consider "when available, epidemiological studies and case reports of adverse health effects" when making a health hazard determination in forming the MSDS. 29 C.F.R. §1910.1200, App. B.

As such, medical books and treatises tell physicians to rely on MSDS and warning labels. AMERICAN MEDICAL ASSOCIATION, GUIDES TO THE EVALUATION OF PERMANENT IMPAIRMENT (Lina Cocchiarella, MS, MSC & Gunnar B.J. Andersson, MD, PhD eds., 5th ed.) (2002); ENVIRONMENTAL AND OCCUPATIONAL MEDICINE (William N. Rom, M.D., M.P.H. ed., 2nd ed.) (1992); OCCUPATIONAL MEDICINE (Carl Zenz, M.D., Sc.D., Q. Bruce Dickerson, M.D., M.P.H., Edward P. Harvarth, Jr., M.D.,

M.P.H. eds., 3rd ed.) (1994); OCCUPATIONAL AND ENVIRONMENTAL RESPIRATORY DISEASE (Phillip Harber, M.D., M.P.H., Marc B. Schenker, M.D., M.P.H., John R. Balmes, M.D. eds.); and HAZARDOUS MATERIALS TOXICOLOGY, CLINICAL PRINCIPLES OF ENVIRONMENTAL HEALTH (John B. Sullivan, Jr., M.D., Gary R. Krieger, M.D., M.P.H.) (1992). These medical books and treatises demonstrate the utilization of MSDS and warning labels is widely recorded in the occupational medicine literature and in fact, "are required," "is necessary," "must be included," "can be quite helpful" and serves as a "cornerstone" according to the literature. *Id.*

Dr. Snodgrass, of the University of Texas Medical Branch, Clinical Pharmacology-Toxicology and Texas Poison Center, filed an amicus submission in the court of appeals that clearly explains physicians are educated and directed to rely on MSDS in treating patients exposed to hazardous chemicals. (App. E., *infra.*) The court of appeals' opinion would now require physicians and educators of physicians to change their teaching practices and treatment protocols when dealing with injuries resulting from exposure to hazardous chemicals. Such a change has no reasonable basis in scientific fact, and no basis in law. The impact of the court of appeals' finding regarding the scientific reliability of MSDS and warning labels is far reaching and should be corrected.

C. The court of appeals' degradation of MSDS is contrary to public policy.

Serious public policy concerns are raised by the court of appeals' erroneous conclusion about the scientific reliability of federally mandated MSDS. The safety and welfare of

the general public is at risk and those persons willing to serve and provide medical treatment to victims of exposure to hazardous chemicals will be subject to unwarranted liability. Such a result is directly contrary to the public policy of the State of Texas, the nation as a whole, and the federal laws which created and govern the requirements of MSDS.

The amicus submissions by the District Chiefs of the Hazardous Materials Response Team demonstrate that the Houston Fire Department's ability to serve the general public will be seriously and negatively eroded if the court of appeals' erroneous holding is not reversed. (App. F, *infra*.) The amicus submission of District Chief Snell and District Chief White clearly demonstrate why it is important that this Court exercise jurisdiction in this case and correct the court of appeals' decision. District Chief Snell and District Chief White both make clear in their respective submissions that members of the Hazardous Materials Response Team are educated and directed to rely on MSDS and, in fact, must routinely do so to perform their duties as emergency first responders to incidents involving hazardous chemicals and the safety and welfare of the general public. The court of appeals' opinion now says to emergency responders that this federally mandated information is not scientifically reliable in spite of regulations that require scientific reliability. The safety and welfare of the general public clearly merits this Court's consideration of the important issues presented by this case and the amicus submissions attached hereto demonstrate why this Court should exercise jurisdiction and correct the court of appeals' erroneous holding that federally mandated MSDS are not scientifically reliable.

CONCLUSION

For the foregoing reason, Petitioners respectfully request that certiorari be granted.

Respectfully submitted,

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APPENDIX A

2004 WL 1064776

Court of Appeals of Texas,
Houston (1st Dist.).
BROOKSHIRE BROTHERS, INC., Appellant,
v.
Wesley SMITH, Appellee.
No. 01-02-00677-CV.

May 13, 2004.
Supplemental Opinion Denying
Further Rehearing and En Banc
Reconsideration Feb. 17, 2005.

Curtis W. Fenley III, Warren T. McCollum, Fenley & Bate, L.L.P., Lufkin, TX, for Appellant.

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Panel consists of Chief Justice RADACK and Justices ALCALA and HIGLEY.

OPINION ON REHEARING

ELSA ALCALA, Justice.

Appellee, Wesley Smith, has filed a motion for rehearing and a motion for rehearing en banc of our opinion on rehearing, issued on December 31, 2003. Appellant, Brookshire Brothers, Inc. (Brookshire), has filed a response to both motions. We grant rehearing, withdraw our opinion of December 31, 2003, issue this opinion in its stead, and vacate our judgment of December 31, 2003.

Accordingly, we deny the motion for rehearing en banc as moot.[1]

In this chemical-exposure case, Brookshire appeals a jury verdict rendered in favor of appellee, Wesley Smith, for injuries Smith claims that he sustained when he was exposed to commercial cleaning products while employed by Brookshire. The jury awarded Smith $46,000 in actual damages and $250,000 in punitive damages, but the trial court reduced the punitive-damages award to $200,000. *See* Tex. Civ. Prac. & Rem.Code Ann. § 41.008 (Vernon Supp.2004). In seven issues, Brookshire challenges the legal sufficiency of Smith's causation evidence, the admissibility of that evidence, and the jury's finding of malice. We reach only the legal-sufficiency issue and reverse and render judgment that Smith take nothing.

Background

In September 1995, Smith was employed as a general maintenance worker at a Brookshire grocery store. During an evening shift, Doug Kranzler, Smith's immediate supervisor, directed Smith to clean the walls and vents of the store's bakery. Kranzler provided Smith with several commercial cleaners, including Clorox Liquid Bleach, Easy-Off Oven Cleaner, Lime-A-Way, Scrubbing Bubbles, and Clorox Formula 409. After Smith began applying the commercial cleaners in the bakery, he experienced irritation to his eyes, skin, nose, and throat. Smith complained to Kranzler about the irritation and asked for protective gear to wear while cleaning the bakery. Kranzler informed

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[1] *See Giesberg v. State*, 945 S.W.2d 120, 131 n. 3 (Tex.App.-Houston [1st Dist.] 1996), *aff'd*, 984 S.W.2d 245 (Tex.Crim.App.1998).

Smith that protective gear was not available and directed Smith to complete his work. Despite persistent irritation, Smith continued cleaning the bakery.

On the following evening, Kranzler again directed Smith to use the same combination of commercial cleaners to clean the store's bathroom. Kranzler did not provide Smith with any protective gear, and Smith experienced the same irritations as those of the previous evening. Smith left at the end of his shift, feeling ill. Smith's parents, concerned about his condition, took him for emergency-room treatment. Smith was diagnosed with reactive airways dysfunction syndrome (RADS), an asthmatic condition that impairs breathing and oxygen flow.

Smith sued Brookshire for personal injuries, alleging that Brookshire's negligence and failure to provide a reasonably safe workplace proximately caused his RADS. At trial, Smith presented excerpts of the deposition testimony of Gary Friedman, M.D., a board-certified specialist in pulmonary disease and internal medicine, as his sole evidence of causation.[2] Dr. Friedman testified that the September 1995 chemical exposure proximately caused Smith to suffer from either RADS or a similar asthmatic condition. Dr. Friedman based his opinion on material

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[2] Smith also presented the testimony of Smith's treating physician, G.W. Dahlberg, M.D., and an industrial-hygiene expert, Vernon E. Rose, Ph.D. Dr. Dahlberg testified that Smith suffered from RADS. Dr. Rose testified that Brookshire failed to provide Smith with a reasonably safe workplace and that this failure constituted malice. Neither Dr. Dahlberg nor Dr. Rose testified that Smith's exposure to the commercial cleaners caused RADS, and Smith concedes on appeal that neither doctor "was called to testify ... [regarding] causation." Thus, we evaluate Dr. Friedman's testimony as Smith's sole evidence of causation.

safety data sheets (MSDS), the commercial cleaners' warning labels, Smith's medical records, and Smith's personal account of his exposure to commercial cleaners on the evenings in question. The MSDS and warning labels identified the contents of the commercial cleaners and the health hazards associated with each. Dr. Friedman clarified, however, that he was not an expert in chemistry. He did not know which commercial cleaner, or combination of cleaners, caused Smith's RADS and did not know the amount of chemical concentration to which Smith had been exposed. At no point did Dr. Friedman refer to any scientific literature associating RADS with commercial cleaners.

Causation and Chemical Exposure

In its fifth issue, which is dispositive of this appeal, Brookshire contends that the evidence was legally insufficient to prove that Smith's RADS resulted from chemical exposure. This issue requires us to decide whether the causation evidence Dr. Friedman offered was scientifically reliable and thus more than a scintilla of evidence to support the judgment in Smith's favor.

A. Preservation of Error

As a preliminary matter, we address Smith's contention that Brookshire did not preserve error. "To preserve a complaint that scientific evidence is unreliable and thus, no evidence, a party must object to the evidence before trial or when the evidence is offered." *Kerr-McGee Corp. v. Helton,* No. 02-0356, 47 Tex. Sup.Ct. J. 248, 251, ___ S.W.3d ___, ___, 2004 WL 224458, *5 (Jan. 30, 2004) (quoting *Maritime Overseas Corp. v. Ellis,* 971 S.W.2d 402,

409 (Tex.1998)). An objection made after the jury has returned its verdict comes too late. *Id.* (quoting same). The purpose of the timeliness requirement is twofold: to allow the offering party "an opportunity to cure any defect" and to prevent "trial and appeal by ambush." *Id.* (quoting same).

In *Kerr-McGee Corporation,* the expert testimony of Michael Riley was the only evidence offered on the amount of damages for breach of an implied covenant to protect a leasehold. 47 Tex. Sup.Ct. J. at 248, 133 S.W.3d at ___, 2004 WL 224458 at *1. After cross-examining Riley, Kerr-McGee objected and moved to strike the testimony as unreliable. *Id.* The trial court overruled the motion and entered judgment on the jury verdict, and the court of appeals affirmed. *Id.* On Kerr-McGee's petition for review, the supreme court concluded that Riley's expert testimony was unreliable and, therefore, no evidence. As here, the responding party argued that Kerr-McGee did not timely object and therefore had not preserved error. *See id.* at 251, ___ S.W.3d at ___, 2004 WL 224458 at *4-*5. The supreme court held that Kerr-McGee preserved error, as required by *Maritime Overseas v. Ellis,* by objecting to Riley's testimony immediately after cross-examining him. *Kerr-McGee Corp.,* 47 Tex. Sup.Ct. J. at 252, ___ S.W.3d at ___, 2004 WL 224458 at *6.

Before trial began, Brookshire moved to strike Dr. Friedman's testimony on the grounds that it was scientifically unreliable. The trial court considered this motion at a pretrial hearing and overruled Brookshire's objection.[3] Dr.

[3] Although Brookshire captioned its motion as a "Motion in Limine to Exclude Expert Witnesses," both the motion and the reporter's record show that the purpose of the motion was to bar Dr. Friedman from

(Continued on following page)

Friedman testified at trial through excerpts of his deposition read into the record. Before his testimony was offered, the trial court ruled on the objections that Brookshire had made during the deposition and thus clarified which excerpts would come into evidence. As Dr. Friedman's deposition testimony was presented, Brookshire objected again to Dr. Friedman's testimony, as follows: "[H]e is not qualified based on *Daubert-Havner.* He does not know the chemical concentrations and does not know the chemicals and does not know the exposures. His testimony is based on MSDS sheets, which is improper scientific evidence." Brookshire's objection occurred just before the portion of Dr. Friedman's testimony in which he referred to MSDS sheets. The trial court overruled Brookshire's objection, noting, "Your objection is overruled. You have it on the record."

We conclude that Brookshire complied with the timeliness requirements of *Maritime Overseas v. Ellis* by moving to strike and exclude Dr. Friedman's testimony, both before trial began and during trial, on the grounds that his expert testimony was not reliable. There was no trial by ambush, and there has been no appeal by ambush. *See Kerr-McGee Corp.*, 47 Tex. Sup.Ct. J. at 252, ___ S.W.3d at ___, 2004 WL 224458 at *5.

B. Standard of Review

Brookshire's burden on appeal is to demonstrate that there is no evidence to support the adverse judgment in favor of Smith. *See Croucher v. Croucher,* 660 S.W.2d 55,

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testifying. Indeed, Smith's trial counsel referred to Brookshire's pretrial motion as seeking that result.

58 (Tex.1983). In determining whether there is no evidence of probative force to support a jury's finding, we consider the evidence in the light most favorable to the verdict and indulge every reasonable inference in the prevailing party's favor. *Merrell Dow Pharm., Inc. v. Havner,* 953 S.W.2d 706, 711 (Tex.1997). We will sustain a no-evidence point when (1) there is a complete absence of evidence of a vital fact, (2) the court is barred by rules of law or of evidence from giving weight to the only evidence offered to prove a vital fact, (3) the evidence offered to prove a vital fact is no more than a mere scintilla, or (4) the evidence conclusively establishes the opposite of a vital fact. *Id.* More than a scintilla of evidence exists when the evidence supporting the finding, as a whole, rises to a level that would enable reasonable and fair-minded people to differ in their conclusions. *Id.*

To establish causation in a personal-injury suit, a plaintiff must prove that the defendant's conduct caused an event and that this event caused the plaintiff to suffer compensable injuries. *Burroughs Wellcome Co. v. Crye,* 907 S.W.2d 497, 499 (Tex.1995); *Coastal Tankships, U.S.A., Inc. v. Anderson,* 87 S.W.3d 591, 603 (Tex.App.-Houston [1st Dist.] 2002, pet. denied). When a lay person's general experience and common sense will not enable that person to determine causation, expert testimony is required. *Coastal Tankships,* 87 S.W.3d at 603. Expert testimony is particularly necessary in chemical-exposure cases, in which medically complex diseases and causal ambiguities compound the need for expert testimony. *See id.; see also Hernandez v. Tex. Employers' Ins. Ass'n,* 783 S.W.2d 250, 252-53 (Tex.App.-Corpus Christi 1989, no writ) (holding that expert testimony needed to determine cause of asthma, which had uncertain causal nature).

Expert testimony must be reliable; otherwise, it is not evidence.[4] *See Havner,* 953 S.W.2d at 712-13; *Coastal Tankships,* 87 S.W.3d at 610. An expert's bare opinion will not suffice. *Havner,* 953 S.W.2d at 711. We review an expert's testimony in its entirety and will not accept the expert's opinion as some evidence merely because the expert used "magic words." *Id.* Expert testimony that is not based on reasonable medical probability, but relies instead on possibility, speculation, or surmise, does not assist the jury and cannot support a judgment. *See id.* at 712.

Much like toxic-tort plaintiffs, chemical-exposure plaintiffs must prove both general and specific causation. *See Havner,* 953 S.W.2d at 714; *Coastal Tankships,* 87 S.W.3d at 602. General causation asks whether a substance is capable of causing a particular injury in the general population; specific causation asks whether that substance caused a particular individual's injury. *Id.* Proving one type of causation does not necessarily prove the other, and logic dictates that both are needed for a chemical-exposure plaintiff to prevail.[5] *Id.; Minn. Mining*

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[4] The following non-exclusive factors may be considered in determining reliability: (1) the extent to which the expert's theory has been or can be tested; (2) the extent to which the expert's technique relies upon his own subjective interpretation; (3) whether the expert's theory has been subjected to peer review and publication; (4) the potential rate of error of the theory; (5) whether the expert's theory or technique has been generally accepted as valid by the relevant scientific community; and (6) the non-judicial uses that have been made of the expert's theory or technique. *See E.I. du Pont de Nemours & Co. v. Robinson,* 923 S.W.2d 549, 557 (Tex.1995).

[5] A plaintiff may not be able to offer direct, reliable evidence of specific causation. *Merrell Dow Pharm., Inc. v. Havner,* 953 S.W.2d 706, 715 (Tex.1997). A plaintiff may, however, be able to prove specific causation circumstantially by offering general-causation evidence, such

(Continued on following page)

& Mfg. Co. v. Atterbury, 978 S.W.2d 183, 199-200 (Tex.App.-Texarkana 1998, pet. denied).

C. Dr. Friedman's Testimony

Smith contends that Dr. Friedman based his causation opinion on (1) specialized training and experience, (2) Smith's medical records and his account of the exposure in question, (3) the MSDS and the commercial cleaners' warning labels, and (4) "other peer review articles." After reviewing Dr. Friedman's testimony in its entirety, we conclude that his testimony cannot support the judgment in Smith's favor because Dr. Friedman's opinion does not provide scientifically reliable proof of general causation.

Dr. Friedman did not present a scientific foundation regarding general causation, as required by *Havner. See id.* at 714. Specifically, Dr. Friedman did not refer to a single epidemiological study or scientific article to prove that exposure to commercial cleaners can cause RADS. Although Dr. Friedman testified that Lime-A-Way decomposes into a toxin "known to cause RADS," he did not substantiate that conclusion with any scientific evidence. Rather, without presenting a scientific basis for general causation, Dr. Friedman opined that Smith's exposure to toxins in the commercial cleaners, as identified in the MSDS and warning labels, caused either RADS or a similar asthmatic condition. A jury may not presume general causation, however. *See Coastal Tankships,* 87

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as epidemiological studies, and by showing similarities between himself and the studies' subjects. *Id.* at 720; *Coastal Tankships, U.S.A., Inc. v. Anderson,* 87 S.W.3d 591, 603 n. 21 (Tex.App.-Houston [1st Dist.] 2002, pet. denied).

S.W.3d at 610-11. The absence of any general-causation evidence, combined with the absence of reliable scientific literature, creates a fatal evidentiary gap in Smith's claim. *See id.; see also Havner,* 953 S.W.2d at 712 (citing *Rosen v. Ciba-Geigy Corp.,* 78 F.3d 316, 319 (7th Cir.1996) (an expert who supplies nothing but a bottom line supplies nothing of value to the judicial process)).

1. *Specialized Training and Experience*

Although Dr. Friedman is an accomplished physician with extensive training and expertise, the controlling issue is not the adequacy of his qualifications but whether his opinion testimony was scientifically reliable. No matter how qualified an expert is, his opinion must still demonstrate scientific indicia that evidences reasonable medical probability before the opinion can be accorded evidentiary value. *See Havner,* 953 S.W.2d at 712. Without a scientific indicia of reliability, the expert's opinion is mere speculation. *See id.* To the extent that Smith argues that Dr. Friedman relied on his own education, training, and expertise in forming his opinion, therefore, Smith's argument relates only to Dr. Friedman's qualifications and does not address reliability.

2. *Smith's Medical Records and Personal Account of the Exposure*

Smith contends that Dr. Friedman's testimony regarding Smith's medical records and his personal account of the exposure in question sufficiently demonstrated scientific

reliability.[6] The excerpts of Dr. Friedman's deposition testimony that Smith read to the jury, however, did not connect Smith's medical records or his personal account of the exposure with a scientific showing of general causation. Dr. Friedman's testimony regarding the medical records related to the type and extent of Smith's injury without offering a scientific insight into the general causes of Smith's condition. Smith attempts to substantiate Dr. Friedman's causation opinion by emphasizing portions of Dr. Friedman's testimony that do not relate to general causation. There was no showing at trial that Smith's medical records addressed whether the commercial cleaners at issue were generally capable of causing RADS. To prove general causation, Dr. Friedman needed to put forth a scientific foundation. *See id.* at 719.

3. *MSDS and Warning Labels*

The record shows that Dr. Friedman based his causation opinion on the MSDS and the warning labels of the commercial cleaners Smith used. Dr. Friedman's extensive reliance on the MSDS and warning labels was nevertheless insufficient because neither the MSDS nor the warning labels, standing alone, provide the type of specific, detailed showing of scientific reliability required to accord evidentiary value to an expert's opinion. *See Coastal Tankships,* 87 S.W.3d at 611 (holding that medical records, discharge summaries, and MSDS were insufficient to

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[6] The medical records were obtained from Smith's treating physicians, G.W. Dahlberg, M.D., C. Wayne Lawrence, Ph.D., and Richard Jackson, M.D. Dr. Dahlberg and Dr. Jackson treated Smith for RADS during the time leading up to trial, and Dr. Lawrence treated Smith for anxiety.

establish scientific reliability); *Moore v. Ashland Chem., Inc.*, 151 F.3d 269, 278 (5th Cir.1998) (noting that MSDS have limited value in determining causation because of lack of evidence showing what tests were conducted in compiling MSDS). Smith is correct in asserting that the MSDS and the warning labels identified particular toxins in the commercial cleaners. Lime-A-Way's MSDS and warning label, for example, identified asthma or RADS as a potential injury that could result from high levels of exposure. But the MSDS and warning labels did not demonstrate, scientifically, that the particular toxins at issue generally cause RADS.[7] *See Moore*, 151 F.3d at 278; *Coastal Tankships*, 87 S.W.3d at 611. There was no evidence produced at trial that discussed the scientific foundation used in formulating the conclusions contained in either the MSDS or the warning labels. Thus, even with the MSDS and warning labels, an evidentiary void concerning general causation remained in Dr. Friedman's opinion. This void could have been remedied only by an

[7] In contending that Dr. Friedman's reliance on the MSDS provided an adequate scientific basis for general causation, Smith relies on *Curtis v. M & S Petroleum*, 174 F.3d 661 (5th Cir.1999). In *Curtis*, however, the expert cited several scientific studies in support of his premise regarding general causation. *See id.* at 669. The court noted that "both scientific literature and strong circumstantial evidence support the causal connection." *Id.* at 670. *Curtis* did not, as Smith contends, reject *Moore's* holding that, in the absence of an established scientific connection between the chemical exposure and illness, MSDS are insufficient to show reliability. *See Moore v. Ashland Chem. Inc.*, 151 F.3d 269, 278 (5th Cir.1998). In this case, because Dr. Friedman did not establish a scientific connection between Smith's exposure to commercial cleaners and RADS, his reliance on MSDS was not sufficient to place evidentiary value on his causation opinion. *See Havner*, 953 S.W.2d at 712-13 (holding that expert testimony that is not reliable is not evidence).

established, scientific connection between the commercial cleaners and RADS. *See Moore,* 151 F.3d at 278.

4. *"Other Peer Review Articles"*

Smith argues that Dr. Friedman established the necessary scientific connection when he testified regarding "other peer review articles," including an article by Arch Carson, M.D., before providing the causation opinion. Although Dr. Friedman briefly answered a question regarding Dr. Carson's article, Dr. Friedman mentioned the article only in passing and never referred to it for the proposition that the commercial cleaners at issue generally cause RADS.[8] In addition, although he discussed MSDS extensively, Dr. Friedman did not discuss Dr. Carson's article in his causation report. The record does not, therefore, support Smith's assertion that Dr. Friedman relied on Dr. Carson's article in forming an opinion regarding general causation.

As to any "other peer review articles," the only other article to which Dr. Friedman referred during his testimony was an article published in the *American Review of Respiratory Disease.* This article outlines the American Thoracic Society's guidelines on the evaluation of asthma

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[8] At one point during the testimony, Smith asked Dr. Friedman the following question regarding plaintiff's exhibit 19:

> **Smith's Counsel**: No. 19, this is an article that was written by Dr. Carson, along with a coauthor; and it indicates, I believe, that one of the determinants of injury, and I turn your attention to page 519, it says, "Determinants of injury." And it says, "Toxic factors." Is one of those factors, Dr. Friedman, the duration of exposure?
>
> **Dr. Friedman**: Yes.

impairment and disability, but is apparently a diagnosis guide that is unrelated to causation. There was no testimony at trial that referenced the article as scientific evidence of general causation. Contrary to Smith's contention, the article appears irrelevant to the issue of general causation.

Conclusion

In sum, the excerpts of Dr. Friedman's deposition testimony that Smith read to the jury did not present a general-causation opinion based on reasonable medical probability. Dr. Friedman provided no scientific support for his theory that Smith's exposure to the commercial cleaners in question was capable of causing RADS. The analytical gap between Dr. Friedman's causation opinion and the scientific data advanced to support that opinion was simply too wide. *See Moore,* 151 F.3d at 279. Because Smith's causation expert provided opinion testimony that was mere conjecture and, therefore, not evidence, we hold that no scientifically reliable evidence supports the jury's verdict in favor of Smith. *See Havner,* 953 S.W.2d at 712.

We sustain issue five. We need not address Smith's remaining issues.

We reverse the judgment of the trial court and render judgment that Smith take nothing.

SUPPLEMENTAL OPINION ON MOTIONS FOR FURTHER REHEARING AND FOR EN BANC RECONSIDERATION

ELSA ALCALA, Justice.

Appellee, Wesley Smith (Smith), has challenged our opinion issued on rehearing on May 13, 2004 by filing a "Motion for Rehearing En Banc." We construed Smith's motion as requesting both further rehearing and en banc reconsideration.[1] We have denied further rehearing, and the en banc Court has voted to deny en banc reconsideration.

We issue this supplement to our opinion of May 13, 2004 to (1) explain the settled practice that this Court follows when a party timely files both a motion for rehearing or further rehearing and a motion for en banc reconsideration, as we described that practice in *Butler v. State,* 6 S.W.3d 636, 637 n. 1 (Tex.App.-Houston [1st Dist.] 1999, pet. ref'd), and thus clarify that (2) the *Butler* practice applies in civil cases.

Procedural Background

This Court has issued three opinions in this case – an original opinion, issued on July 31, 2003, and two opinions on rehearing issued on December 31, 2003 and May 13, 2004. Smith challenged each of these by filing a single motion in which he requested both rehearing by the original panel of justices who decided the case and reconsideration by the en banc Court. Appellant, Brookshire

[1] The Rules of Appellate Procedure contain no provisions for "rehearing en banc." *See* Tex.R.App. P. 49.7 (En Banc Reconsideration).

Brothers, Inc., responded to all three motions. The Court has applied the same procedural practice to each of Smith's challenges to the three opinions. The panel of justices who heard the case has twice granted Smith's motions for rehearing by issuing a new opinion and judgment. These issued on December 31, 2003 to replace the July 31, 2003 opinion and judgment, and on May 13, 2004 to replace the December 31, 2003 opinion and judgment. Smith's motions for en banc reconsideration of the July 31, 2003 and December 31, 2003 opinions were rendered moot when the original panel granted rehearing.[2]

After we issued our May 13, 2004 opinion on rehearing, Smith timely filed a "Motion for Rehearing en Banc." We construed that motion as requesting both further rehearing and en banc reconsideration. The justices who participated in the May 13, 2004 panel opinion considered Smith's motion, to the extent that it constituted a motion for further rehearing, but concluded that it had no merit. Smith's motion was then presented to the en banc Court, which voted to deny en banc reconsideration.

Discussion

A motion for rehearing differs from and serves a different purpose than a motion for en banc reconsideration. For example, stricter time limits govern the motion for rehearing than govern the motion for en banc reconsideration. *Compare* Tex.R.App. P. 49.1 (must file motion for

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[2] *See Hartrick v. Great Am. Lloyds Inc. Co.*, 62 S.W.3d 270, 272 (Tex.App.-Houston [1st Dist.] 2001, no pet.) (opinion on rehearing; citing *Giesberg v. State*, 945 S.W.2d 120, 131 n. 3 (Tex.App.-Houston [1st Dist.] 1997) (opinion on rehearing), *aff'd*, 984 S.W.2d 245 (Tex.Crim.App.1998)).

rehearing within 15 days after court-of-appeals judgment is rendered) *with* Tex.R.App. P. 49.7 (may file motion for en banc reconsideration while court of appeals has plenary jurisdiction);[3] *see also* Tex.R.App. P. 19.1 (plenary power of court of appeals expires 60 days after judgment if no timely filed motion to extend time or motion for rehearing is then pending); Tex.R.App. P. 41.2(c) (stating that en banc reconsideration is disfavored and listing standards); Tex.R.App. P. 49.7 (reconsideration en banc suspends finality of panel's judgment or order).

Whether seeking rehearing, pursuant to rule 49.1, or further rehearing, pursuant to rule 49.5, a party's sole purpose is to convince the panel of justices who considered the case to change the decision because it was erroneous – for whatever reason. *See* Tex.R.App. P. 49.1, 49.5; *see also* Tex.R.App. P. 49.3 (authorizing majority of justices who participated in the case to grant rehearing). In contrast, en banc reconsideration is limited to situations in which (1) en banc reconsideration is necessary to secure or maintain uniformity of the Court's decisions or (2) extraordinary circumstances require en banc consideration. *See* Tex.R.App. P. 41.2(c).

Smith's "Motion for Rehearing en Banc" begins by arguing that extraordinary circumstances require en banc consideration of this case and thus invokes one of the standards of rule 41.2(c). *See id.* The arguments in the motion, however, repeatedly assert that "the panel opinion

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[3] Thus, a party who does not timely file a motion for rehearing or timely move for an extension of time to file a motion for rehearing, pursuant to rule 49.8, is limited to seeking en banc reconsideration within the period of the appellate court's plenary power. *See* Tex.R.App. P. 19.1(a), 49.7, 49.8.

is wrong." The substance of the motion thus concerns matters pertinent to motions for further rehearing under rule 49.5 and matters concerning rule 41.2(c).

When a party timely files both a motion for rehearing or further rehearing and a motion for en banc reconsideration, it has long been the practice of this Court to present the motion for rehearing or further rehearing to the original panel of justices who heard the case; if the panel denies rehearing or further rehearing, as here, the motion for en banc reconsideration is then presented to the en banc Court. *See Butler v. State,* 6 S.W.3d 636, 637 & n. 1 (Tex.App.-Houston [1st Dist.] 1999, pet. ref'd); *see also Barker v. Eckman,* No. 01-01-00079-CV, slip op. at 2, 2004 WL 163462 at *1 (Tex.App.-Houston [1st Dist.] Jan. 22, 2004, pet. granted) (mem. opinion on rehearing; citing *Butler* for discussion of treatment of motions for en banc consideration).[4]

Having considered the merits of Smith's "motion for rehearing en banc," we deny the motion to the extent that it constituted a further motion for rehearing under rule 49.5. *See* Tex.R.App. P. 49.5. On presentation of Smith's request for en banc reconsideration, the en banc Court denied reconsideration en banc. *See* Tex.R.App. P. 49.7.

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[4] If the panel grants rehearing, however, as occurred here twice previously, then the "Motion for Rehearing En Banc" is rendered moot. *See Hartrick,* 62 S.W.3d at 272 (citing *Giesberg,* 945 S.W.2d at 131 n. 3).

Conclusion

We deny further rehearing.

En banc reconsideration was requested. No majority of the en banc Court having voted for reconsideration, en banc reconsideration is denied.

2004 WL 1064776 (Tex.App.-Hous. (1 Dist.))

APPENDIX B

CAUSE NO. 17290

WESLEY SMITH	§	**IN THE DISTRICT COURT OF**
VS.	§	**TRINITY COUNTY, TEXAS**
BROOKSHIRE BROTHERS, INC.	§	**411th JUDICIAL DISTRICT**

JUDGMENT

On the 10th day of December, 2001, came on to be heard this civil cause, wherein Wesley Smith, the Plaintiff in the cause, appeared both in person and through his attorney of record and announced ready for trial, and further, that Brookshire Brothers, Inc., Defendant in the cause, appeared both by designated corporate representative and through its attorney of record and announced ready for trial, and a jury having been previously demanded a jury consisting of twelve qualified jurors was duly empaneled by the Court and, thereafter, the case proceeded to trial.

At the conclusion of the evidence, the Court submitted the following questions of fact to the jury and obtained the following answers (as reflected by the charge of the Court which is incorporated herein by reference):

QUESTION NO. 1

Did the negligence, if any, of the defendant, Brookshire Brothers, Inc., proximately cause the injury in question to the plaintiff, Wesley Smith?

ANSWER "yes" or "no."

ANSWER: Yes

QUESTION NO. 1A

Did the defendant, Brookshire Brothers, Inc., fail to provide the plaintiff, Wesley Smith, a reasonably safe work place which proximately caused the injury in question to the plaintiff Wesley Smith?

ANSWER "yes" or "no."

ANSWER: Yes

You are instructed as follows:

Every employer shall furnish and maintain employment and a place of employment which shall be reasonably safe and healthful for employees. Every employer shall install, maintain, and use such methods, processes, devices, and safeguards including methods of sanitation and hygiene, as are reasonably necessary to protect the life health, and safety of such employees, and shall do every other thing reasonably necessary to render safe such employment and place of employment.

QUESTION NO. 2

What sum of money, if paid now in cash, would fairly and reasonably compensate Wesley Smith for his injuries, if any, that resulted from the occurrence in question?

Consider the elements of damages listed below and none other. Consider each element separately. Do not include damages for one element in any other element. Do not include interest on any amount of damages you find.

Answer separately, in dollars and cents, for damages, if any.

a. Physical pain sustained in the past.
Answer **$1,000.00**

b. Physical pain that, in reasonable probability, Wesley Smith will suffer in the future.
Answer **$10,000.00**

c. Mental anguish sustained in the past.
Answer **$5,000.00**

d. Mental anguish that, in reasonable probability, Wesley Smith will suffer in the future.
Answer **$5,000.00**

e. Loss of earning capacity sustained in the past.
Answer **$ 0**

f. Loss of earning capacity that, in reasonable probability, Wesley Smith will sustain in the future.
Answer **$ 0**

g. Physical impairment sustained in the past.
Answer **$10,000.00**

h. Physical impairment that, in reasonable probability Wesley Smith will sustain in the future.
Answer **$5,000.00**

i. Medical care that, in reasonable probability Wesley Smith will incur in the future.
Answer **$10,000.00**

QUESTION NO. 3

Do you find by clear and convincing evidence that the harm to Wesley Smith resulted from malice?

"Clear and convincing evidence" means the measure or degree of proof that produces a firm belief or conviction of the truth of the allegations sought to be established.

"Malice" means an act or omission by Brookshire Brothers,

(i) which, when viewed objectively from the standpoint of Brookshire Brothers at the time of its occurrence, involved an extreme degree of risk, considering the probability and magnitude of the potential harm to others; and

(ii) of which Brookshire Brothers had actual, subjective awareness of the risk involved, but nevertheless proceeded with conscious indifference to the rights, safety, or welfare of others.

ANSWER "yes" or "no."

ANSWER: Yes

QUESTION NO. 4

What sum of money, if any, if paid now in cash, should be assessed against Brookshire Brothers and awarded to Wesley Smith as exemplary damages, if any, for the conduct found in response to Question No. 3.

"Exemplary damages" means an amount that you may in your discretion award as a penalty or by way of punishment.

Factors to consider in awarding exemplary damages, if any, are:

a. The nature of the wrong.

b. The character of the conduct involved.

c. The degree of culpability of Brookshire Brothers.

d. The situation and sensibilities of the parties concerned.

e. The extent to which, such conduct offends a public sense of justice and propriety.

f. The net worth of Brookshire Brothers.

Answer in dollars and cents, if any.

$250,000.00

Inasmuch as it appears to the Court that the verdict of the jury in the cause was for the Plaintiff Wesley Smith and against the Defendant Brookshire Brothers, Inc., it is therefore the ORDER of this Court that judgment be and the same is hereby rendered on the verdict in favor of the Plaintiff Wesley Smith and against Defendant Brookshire Brothers, Inc.

It is, therefore, **ORDERED, ADJUDGED,** and **DECREED** by this Court that the Plaintiff Wesley Smith is entitled to recover and shall recover of and from the Defendant Brookshire Brothers, Inc. the sum of $46,000 in actual compensatory damages and the sum of $200,000 in punitive damages.

It is **FURTHER ORDERED** that this judgment shall include (by stipulation of the parties and without waiver of any rights otherwise perfectible by appeal) prejudgment interest in the amount of $27,165.90; and postjudgment interest on all damages, whether actual or punitive, in the amount of ten percent (10%) per annum until paid.

It is **FURTHER ORDERED** that all costs of court expended or incurred in this cause are adjudged against Defendant Brookshire Brothers, Inc. All writs and processes for the enforcement and collection of this judgment or the costs of court may issue as necessary. All other relief not expressly granted herein is denied.

ENTERED this 26th day of February, 2002.

/s/ Robert H. Trap
JUDGE PRESIDING

APPENDIX C

[SEAL]

OFFICIAL NOTICE FROM
SUPREME COURT OF TEXAS
Post Office Box 12248
Austin, Texas 78711-2248

[POSTMARK]
Apr. 21, 2006

RE: Case No. 05-0264
COA #: 01-02-00677-CV
STYLE: WESLEY SMITH
v. BROOKSHIRE BROTHERS, INC.

Today the Supreme Court of Texas denied the motion for rehearing of the above-referenced petition for review.

MAIL TO:

MS. ALICE OLIVER-PARROT
BURROW & PARROTT L L P
1301 MCKINNEY SUITE 3500
HOUSTON TX 77010-3092

APPENDIX D

[LOGO] **HAZARDOUS MATERIALS RESPONSE TEAM** [LOGO]

Houston Fire Department
7825 Harrisburg
Houston, Texas 77012
Phone: (713) 928-6711 or
(713) 928-6152
FAX (713) 928-6160

February 21, 2006

Mr. Andrew Weber, Clerk
Supreme Court of Texas
The Supreme Court Building
201 W. 14th Street, Room 104
Austin, Texas 78701

Re: Cause No 05-0264; *Wesley Smith Brookshire Brothers, Inc.;* On Appeal from the 1st Court of Appeals, Houston, Texas.

Dear Mr. Weber:

Please file and submit this amicus letter brief to the Justices of the Supreme Court. My name is Blake White, and I am tendering this amicus submission for filing and distribution to the Justices of the Court in my capacity as the District Chief of the Houston Fire Department Hazardous Materials Response Team. Because the court of appeals' opinion will greatly impact the ability of emergency responders to treat victims of exposure to hazardous chemicals, and may well expose emergency responders to third-party liability when relying on Material Safety Data Sheets ("MSDS"), the Houston Fire Department has an interest in the correct development of the law with respect

to relying on the MSDS. I have not received any compensation for the preparation of this letter.

On May 13, 2004, the First Court of Appeals in Houston, Texas issued an opinion in the above-referenced case, holding that the MSDS, required of every manufacturer and importer of hazardous chemicals by federal and state law, cannot be relied upon as scientifically reliable and accurate evidence that the particular hazardous chemical named can generally cause the injury identified in the MSDS itself. I have been advised that this Court has declined to accept jurisdiction over this appeal to correct this erroneous and significant holding. It is critically and vitally important to emergency responders who treat victims of exposure to hazardous chemicals that the Court accept jurisdiction and correct the court of appeals' erroneous opinion. The court of appeals' holding that a MSDS is not scientifically reliable dramatically undermines established and approved education and practice of the Houston Fire Department, and if allowed to stand will result in a serious threat to public safety and health.

As members of the Hazardous Materials Response Team, we are educated and directed to rely upon the MSDS and must routinely rely on the information conveyed to perform our duties as emergency responders. OSHA mandates that each product used commercially which contains any hazardous ingredient must be accompanied by a Material Safety Data Sheet, or MSDS, upon entering a facility if there is one or more person employed at that location. The MSDS was initially designed to convey important safety hazard information and measures to protect persons who may come in contact with a product, including employees, fire fighters, etc. Current,

revised and obsolete Material Safety Data Sheets must be kept on file at a facility for 30 years or as long as the company is in business (whichever comes first).

The MSDS also serves to provide important environmental compliance information, including VOC content, hazardous chemical ingredients and their CAS numbers, product density, and vapor pressure. This information is required for hazardous air pollutant (HAP) and VOC emission calculations as well as other annual record keeping and reporting requirements, such as SARA 311 and 312 reporting.

With the promulgation of the Hazard Communication Standard (HCS) in 1983, the MSDS took a central role in a regulatory scheme designed to ensure that workers had essential safety and health information about the potentially hazardous substances in their workplace. But as a 1996 NACOSH report noted, Material Safety Data Sheets serve a number of other purposes besides HCS and various audiences beyond the general work force.

"The MSDS is used to provide information to emergency responders and local planning authorities and also serves as a primary data source for health professionals working with exposed individuals," the report noted.

The members of the Houston Fire Department's Hazardous Materials Response Team rely heavily upon the information within the product's MSDS. Because the product manufacturer is required to generate the MSDS, this information is very specific to the chemical in question as opposed to the broad and general information found in most references. Many times the Houston Fire Department has provided, at the request of the receiving hospital,

an MSDS for the product to which victims were exposed or contaminated with. The MSDS is also part of the documentation provided to medical facilities that subscribe to MicroMedex, the nations leading information source on chemicals and biological agents.

While there are other sources of technical data available, it is the experience of the Hazardous Material Response Team that the MSDS is by far one of the most useful pieces of product information readily available. While the court of appeals was concerned about the availability of epidemiological studies, it simply does not make sense to expose existing populations to chemicals that are already known toxins and are stipulated by their manufacturer to cause certain reactions. Indeed, the Federal Government requires manufacturers and importers of hazardous chemicals to prepare the MSDS and warning labels that have all the information regarding health and environmental hazards, analyze the chemistry of hazardous chemicals, assess the hazard, provide hazard warning information, and identify potential injury. The MSDS is required by federal law to be reliable and accurate. In the context of known hazardous chemicals, the MSDS may very well be the best available data to the emergency responder. If the court of appeals' opinion is not corrected, victims of exposure to chemicals will suffer and those emergency responders who are simply doing their job could be subject to third-party liability. It is, therefore, of vital importance to the public health and welfare that this Court accept jurisdiction over this appeal to correct

the court of appeals' erroneous holding about the scientific reliability of Materials Safety Data Sheets.

Sincerely,

/s/ Blake White
Blake White
District Chief
Houston Fire Department
Hazardous Materials Response Team

cc: Ms. Alice Oliver-Parrott
Burrow & Parrott, LLP
1301 McKinney, Ste. 3500
Houston, Texas 77010

Curtis W. Fenley, III
Warren T. McCollum
FENLEY & BATE, L.L.P.
P.O. Box 450
Lufkin, Texas 75902-0450

CERTIFICATE OF SERVICE

This is to certify that on February 21, 2006, a true and correct copy of the attached letter brief was served by regular mail on all counsel shown below.

Ms. Alice Oliver-Parrott
Ms. Teresa Arguindegui
Burrow & Parrott, L.L.P.
1301 McKinney, Ste. 3500
Houston, TX 77010

Mr. Curtis Fenley, III
Mr. Warren T. McCollum
Fenley & Bate, L.L.P.
P.O. Box 450
Lufkin, TX 75902-0450

/s/ Blake White
Blake White
District Chief
Houston Fire Department
Hazardous Materials
Response Team

APPENDIX E

The University of Texas Medical Branch

School of Medicine
Graduate School of Biomedical Sciences
School of Allied Health Sciences
School of Nursing
Marine Biomedical Institute
Institute for the Medical Humanities
UTMB Hospitals

Clinical Pharmacology-Toxicology
and
Texas Poison Center
University of Texas Medical Branch
301 University Blvd
Galveston
TX 77555-0631

tel: 409-772-9612
fax: 409-747-5205

(Filed Jan. 22, 2004)

Ms. Margie Thompson, Clerk
First Court of Appeals
1307 San Jacinto, 10th Floor
Houston
TX 77002

RE: No. 01-02-00677-CV; Brookshire Brothers, Inc. v. Wesley Smith;
In the First Court of Appeals,
Houston, Texas

Dear Ms. Thompson:

Please file and submit his amicus curiae letter brief to Chief Justice Radack and Justices Alcala and Higley. I am tendering to the Court as a Professor and Head of the Clinical Pharmacology-Toxicology Unit, at the University

of Texas Medical Branch, and the Medical Director of the Texas Poison Center – Houston/Galveston. My name is Dr. Wayne R. Snodgrass, M.D., Ph.D. This Court recently issued an opinion in the above-referenced case, holding that Material Safety Data Sheets ("MSDS"), required of every manufacturer and importer of hazardous chemicals by federal law, cannot be relied upon as scientifically reliable and accurate evidence that the particular hazardous chemical named can generally cause the injury identified in the MSDS itself. As physicians, we are educated and directed to rely upon MSDS in treating patients exposed to hazardous chemicals. The Court's recent opinion will impact greatly a physician's ability to treat patients and may well expose physician's to third-part liability when relying on MSDS. As a physician and educator, I have an interest in the correct development of the law with respect to relying on MSDS. I have not received any compensation for the preparation of this letter.

MSDS and warning labels may provide important information regarding the irritancy and other properties of chemicals. This information may include items such as known instances of asthma resulting from certain inhaled chemical vapors or fumes. To not utilize this information in many instances would be substandard for a physician in the course of evaluating and treating a patient.

Courts of law should be aware of the distinction between the Havner/Robinson rulings including an odds ratio of 2.0 or greater in epidemiologic studies versus that of causation in general. The Havner and other similar rulings apply when and if there is published peer-reviewed medical and scientific data in the form of an epidemiologic study to address the issue under consideration. However,

many times, as we know in medicine and science, such data may not exist. Thus, we physicians and scientists utilize the best data available to make determinations of causation as well as clinical diagnoses and selection of optimal therapies.

This approach of utilizing the best available data has been a tenet of medicine and science for more than 4 decades, and pre-dates the U.S. legal system's rulings of Havner and similar legal writings, which are limited to and focus only on a single odds ratio number from epidemiologic studies.

The most widely cited written document on this approach of utilizing the best available data is that of the Hill criteria. These criteria were published in 1965 (cited below) and include various considerations, not all of which may be available in a given instance, that serve as a guide to determination of causation. The Hill criteria include:

1. strength of the observed association,
2. consistency of the observed association,
3. specificity of the observed association,
4. temporal (time-course) relationship of the association,
5. presence of a dose-response relationship (this may not apply in cases of allergy),
6. biologic plausibility,
7. coherence of association (cause-effect interpretation should not conflict with known pathology of the disease or illness in question),
8. experimentation, when feasible or available, i.e., does preventive action based on some supposed association in fact prevent the outcome in question.

Thus, courts of law should realize that Havner and other similar writings apply only when sufficient data exist such that an epidemiologic study has been done and published. In many other instances, where such data is not available, medically and scientifically rational consideration of the best available data must be utilized and given appropriate consideration with approaches such as the Hill criteria. To not do so is to ignore and repudiate the most basic premises and foundations of medicine and science.

Sincerely,

/s/ Wayne R. Snodgrass

Wayne R. Snodgrass, M.D., Ph.D.
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Clinical Pharmacology-Toxicology Unit
Medical Directory, Texas Poison Center – Houston/Galveston
Diplomate, American Board of Pediatrics
American Board of Medical Toxicology
American Board of Clinical Pharmacology
Past President, American Academy of Clinical Toxicology
Chairman, Scientific Advisory Committee, American Association of Poison Control Centers
Chairman, Pediatric Expert Committee, United States Pharmacopeia
Chairman, Data Safety Monitoring Board, Pediatric Pharmacology Research Units, National Institutes of Health
member, Steering Committee, Obstetric-Fetal Pharmacology Research Units, National Institutes of Health
member, Council of Experts, United States Pharmacopeia
member, Non-Prescription Drug Advisory Committee, FDA

Hill AB: The environment and disease: association or causation? Proceedings Royal Society Medicine 1965; 58:295 – 300

cc: Ms. Alice Oliver-Parrott
Ms. Maria Teresa Arguindegui
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APPENDIX F

[LOGO] **HAZARDOUS MATERIALS RESPONSE TEAM** [LOGO]

Houston Fire Department
7825 Harrisburg
Houston, Texas 77012
Phone: (713) 928-6711 or
(713) 928-6152
FAX (713) 928-6160

June 22, 2004

Ms. Margie Thompson, Clerk
First Court of Appeals
1307 San Jacinto, 10th Floor
Houston, Texas 77002

RE: No. 01-02-00677-CV;
Berkshire Brothers, Inc. v. Wesley Smith;
In the First Court of Appeals,
Houston, Texas

Dear Ms. Thompson:

Please file and submit this amicus curie [sic] letter brief to the Chief Justice Radack and Justices Alcala and Highley, tendered by the Houston Fire Department, Hazardous Materials Response Team. My name is Daniel G. Spell [sic], District Chief. This Court recently issued an opinion in the above referenced case, holding that Material Safety Data Sheets ("MSDS"), required of every manufacturer and importer of hazardous chemicals by federal law, cannot be relied upon as scientifically reliable and accurate evidence that the particular hazardous chemical named can generally cause the injury identified in the MSDS itself. As members of the Hazardous Materials Response Team, we are educated and directed to rely upon MSDS and must

routinely rely on the information conveyed to perform our duties as emergency responders. Because the Court's recent opinion will greatly impact the ability of emergency responders to treat victims of exposure to hazardous chemicals, and may well expose emergency responders to third-party liability when relying on MSDS, the Houston Fire Department has an interest in the correct development of the law with respect to relying on MSDS. As District Chief, I have not received any compensation for the preparation of this letter.

OSHA mandates that each product used commercially which contains any hazardous ingredient must be accompanied by a Material Safety Data Sheet or MSDS upon entering a facility if there is one or more people employed at that location. The MSDS was initially designed to convey important safety hazard information and measures to protect persons who may come in contact with a product, including employees, fire fighters, etc. Currently, revised, and obsolete MSDS must be kept on file at a facility for 30 years or as long as the company is in business (whichever comes first).

The MSDS also serves to provide important environmental compliance information, including VOC content, hazardous chemical ingredients and their CAS numbers, product density, and vapor pressure. This information is required for hazardous pollutant (HAPs) and VOC emission calculations, as well as other annual record keeping and reporting requirements, such as SARA 311 and 312 reporting.

With the promulgation of the hazard communication standard (HCS) in 1983, MSDSs took a central role in a regulatory scheme designed to ensure that workers had

essential safety and health information about the potentially hazardous substances in their workplace. But as a 1996 NACOSH report noted, MSDSs serve a number of other purposes besides HCS and various audiences beyond the general work force.

"The MSDS is used to provide information to emergency responders and local planning authorities and also serves as a primary data source for health professionals working with exposed individuals," the report noted.

The members of the Houston Fire Department's Hazardous Materials Response Team rely heavily upon the information within the product's MSDS. Because the product manufacturer is required to generate the MSDS, this information is very specific to the chemical in question as opposed to the broad and general information found in most references. Many times the HFD has provided, at the request of the receiving hospital, an MSDS for the product to which victims were exposed or contaminated with. The MSDS is also part of the documentation provided to medical facilities who subscribe to MicroMedex, the nations leading formation source on chemical and biological agents.

CERTIFICATE OF SERVICE

This is to certify that on July 06, 2004, a true and correct copy of the attached letter brief was served by regular mail on all counsel shown below:

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/s/ Daniel G. Snell
Daniel G. Snell
District Chief
Houston Fire Department
Hazardous Materials
Response Team

APPENDIX G

Our federal government views Material Safety Data Sheets as so reliable that the following are exemplary categories of persons *required by law* to use MSDS and to accept and acknowledge the scientific reliability of the information contained therein. Those listed below are also examples of those persons who will be adversely and negatively impacted by the court of appeals' decision that MSDS are not scientifically reliable. Additionally, the court of appeals' opinion conflicts with the following federal regulations:

Affected Party	Federal Citation	Federal Mandate
Manufacturer and importers of hazardous chemicals	29 CFR 1910.1200(g)(5)	Manufacturers and importers of hazardous chemicals are required to research the best, peer-reviewed scientific literature to form the MSDS.
Every Employer in the United States that has a hazardous chemical on site.	29 CFR 1910.1200(d)(1) 29 CFR 1910.1200(g)(8)	. . . "Employers are not required to evaluate chemicals unless they choose not to rely on the evaluation performed by the chemical manufacturer or importer for the chemical (the MSDS) to satisfy this requirement"

Affected Party	Federal Citation	Federal Mandate
	29 CFR 1910.1200, App. E	OSHA regulations tell employers "you can rely on the information received from your suppliers. You have no independent duty to analyze the chemical or evaluate the hazards of it."
Local emergency planning committees	42 U.S.C.A. § 11021(a)(1)(A)	MSDS shall be provided to the agency under the reporting requirements of the Emergency Planning and Community Right to Know Act
State Emergency Response Commissions	42 U.S.C.A. § 11021(a)(1)(A)	MSDS shall be provided to the agency under the reporting requirements of the Emergency Planning and Community Right to Know Act
First Responders and Fire Departments	42 U.S.C.A. § 11021(a)(1)(A)	MSDS shall be provided to the agency under the reporting requirements of

Affected Party	Federal Citation	Federal Mandate
		the Emergency Planning and Community Right to Know Act
Physicians and Nurses	42 U.S.C.A. § 11043(b)	MSDS shall be immediately provided to a nurse or physician when they make a request.
Manufacturers of Filled Fiber Optic Cables	7 C.F.R. § 1755.900	For initial acceptance, the manufacturer must submit . . . OSHA MSDS for all components.
Manufacturers of Outside Plant Housings and Serving Area Interface (SAI) Systems	C.F.R. § 1755.910	For initial acceptance the manufacturer shall . . . Provide OSHA MSDS for the product
Manufacturers of Products requiring special labeling	16 C.F.R. § 1500.14	Where appropriate, more detailed information that relates to chronic hazard(s), such as physical properties, decomposition products, detailed safety instructions, or disposal recommendations, shall be included in

Affected Party	Federal Citation	Federal Mandate
		supplemental documents, such as Material Safety Data Sheets, technical brochures, technical data sheets etc.
Manufacturers of products containing Natamycin	21 C.F.R. § 573.685	To assure the safe use of the additive, the label or labeling of the additive shall bear, in addition to other information required by the Federal Food, Drug, and Cosmetic Act, the following . . . A contact address and telephone number for reporting adverse reactions experienced by users, or to request a copy of the MSDS for natamycin.
Safety Managers	29 C.F.R. § 1910.119	The employer shall complete a compilation of written process safety information before conducting any process hazard

Affected Party	Federal Citation	Federal Mandate
		analysis required by the standard. Note: MSDS meeting the requirements of *29 CFR 1910.1200(g)* may be used to comply with this requirement
Testers of Concentrated aqueous ammonium hydroxide	29 C.F.R. § 1910.120, App. A	The person conducting the test shall review the MSDS for aqueous ammonia.
Analyzers of asbestos	29 C.F.R. § 1915.1001, App. K	Some of the solvents used, such as THF (tetrahydrofuran), are toxic and should only be handled in an appropriate fume hood and according to instructions given in the MSDS.
One who determines hazards	29 C.F.R. § 1917.28, App. B	Adequacy and reporting of data. The results of any studies which are designed and conducted according to established scientific principles, and which report statistically

Affected Party	Federal Citation	Federal Mandate
		significant conclusions regarding the health effects of a chemical, shall be a sufficient basis for a hazard determination and reported on any MSDS.
Chemical manufacturer, importer, distributor, or employer	29 C.F.R. § 1917.28, App. C	The following is a list of available data sources which the chemical manufacturer, importer, distributor, or employer may wish to consult to evaluate the hazards of chemicals they produce or import . . . Any information obtained from the supplier of the chemical, such as MSDS or product safety bulletins.
First Aid Training Programs	29 C.F.R. Pt. 1918, App. V	Trainees should be instructed in the acute effect of chemicals utilized in their plants, the location of chemical inventories, MSDS's chemical

Affected Party	Federal Citation	Federal Mandate
		emergency information, and antidote supplies.
Process Safety Management	29 C.F.R. § 1926.64, App. C	Complete and accurate written information concerning process chemicals, process technology, and process equipment is . . . a necessary resource to a variety of users including the team that will perform the process hazards analysis . . . Current MSDS information can be used to help meet this requirement.
Employers working with Asbestos	29 C.F.R. § 1926.1101, App. K	Some of the solvents used, such as THF (tetrahydrofuran), are toxic and should only be handled in an appropriate fume hood and according to instructions given in the MSDS
Employers working with cadmium	29 C.F.R. § 1926.1127	Prior to the performance of any construction work where employees

Affected Party	Federal Citation	Federal Mandate
		may be potentially exposed to cadmium, the employer shall establish the applicability of this standard by determining whether cadmium is present in the workplace and whether there is the possibility that employee exposures will be at or above the action level. Investigation shall include a review of relevant plans, past reports, MSDS and other available records, and consultations with the property owner and discussions with appropriate individuals and agencies
OSHA requirements	29 C.F.R. § 1960.34	Agencies . . . and suppliers . . . shall establish and maintain a product safety program which . . . Includes preparation of FEDSTD 313,

Affected Party	Federal Citation	Federal Mandate
		MSDS, involving all interested agencies in review to keep the standard current. MSDS provided by agencies or contractors shall meet the requirements of FEDSTD 313 and be furnished to DOD for filing and distribution.
Creators of HazCom program	30 C.F.R. § 47.32	The HazCom program must include the following . . . MSDSs.
Mine Safety and Health Administration, Department of Labor	30 C.F.R. § 47.51	Operators must have an MSDS for each hazardous chemical which they produce or use.
Mine Safety and Health Administration, Department of Labor	30 C.F.R. § 47.73	For a hazardous chemical produced at the mine, the operator must provide customers, upon request, with the chemical's label or a copy of the label information, and the chemical's MSDS.

Affected Party	Federal Citation	Federal Mandate
Manufacturers of Filled Fiber Optic Cables	7 C.F.R. § 1755.900	For initial acceptance, the manufacturer must submit . . . OSHA MSDS for all components.
Manufacturers of Outside Plant Housings and Serving Area Interface (SAI) Systems	C.F.R. § 1755.910	For initial acceptance the manufacturer shall . . . Provide OSHA MSDS for the product
Manufacturers of Products requiring special labeling	16 C.F.R. § 1500.14	Where appropriate, more detailed information that relates to chronic hazard(s), such as physical properties, decomposition products, detailed safety instructions, or disposal recommendations, shall be included in supplemental documents, such as Material Safety Data Sheets, technical brochures, technical data sheets etc.
Manufacturers of products containing	21 C.F.R. § 573.685	To assure the safe use of the additive, the label or labeling

Affected Party	Federal Citation	Federal Mandate
Natamycin		of the additive shall bear, in addition to other information required by the Federal Food, Drug, and Cosmetic Act, the following . . . A contact address and telephone number for reporting adverse reactions experienced by users, or to request a copy of the MSDS for natamycin.
Safety Managers	29 C.F.R. § 1910.119	The employer shall complete a compilation of written process safety information before conducting any process hazard analysis required by the standard. Note: MSDS meeting the requirements of *29 CFR 1910.1200(g)* may be used to comply with this requirement
Testers of Concentrated aqueous ammonium hydroxide	29 C.F.R. § 1910.120, App. A	The person conducting the test shall review the MSDS for aqueous ammonia.

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One who determines hazards	29 C.F.R. § 1917.28, App. B	Adequacy and reporting of data. The results of any studies which are designed and conducted according to established scientific principles, and which report statistically significant conclusions regarding the health effects of a chemical, shall be a sufficient basis for a hazard determination and reported on any MSDS.
Chemical manufacturer, importer, distributor, or employer	29 C.F.R. § 1917.28, App. C	The following is a list of available data sources which the chemical manufacturer,

Affected Party	Federal Citation	Federal Mandate
		importer, distributor, or employer may wish to consult to evaluate the hazards of chemicals they produce or import . . . Any information obtained from the supplier of the chemical, such as MSDS or product safety bulletins.
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Process Safety Management	29 C.F.R. § 1926.64, App. C	Complete and accurate written information concerning process chemicals, process technology, and process equipment is . . . a necessary resource to a variety of users including the team

Affected Party	Federal Citation	Federal Mandate
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Employers working with cadmium	29 C.F.R. § 1926.1127	Prior to the performance of any construction work where employees may be potentially exposed to cadmium, the employer shall establish the applicability of this standard by determining whether cadmium is present in the workplace and whether there is the possibility that employee exposures

Affected Party	Federal Citation	Federal Mandate
		will be at or above the action level. Investigation shall include a review of relevant plans, past reports, MSDS and other available records, and consultations with the property owner and discussions with appropriate individuals and agencies
OSHA requirements	29 C.F.R. § 1960.34	Agencies . . . and suppliers . . . shall establish and maintain a product safety program which . . . Includes preparation of FEDSTD 313, MSDS, involving all interested agencies in review to keep the standard current. MSDS provided by agencies or contractors shall meet the requirements of FEDSTD 313 and be furnished to DOD for filing and distribution.

Affected Party	Federal Citation	Federal Mandate
Creators of HazCom program	30 C.F.R. § 47.32	The HazCom program must include the following . . . MSDSs.
Mine Safety and Health Administration, Department of Labor	30 C.F.R. § 47.51	Operators must have an MSDS for each hazardous chemical which they produce or use.
Mine Safety and Health Administration, Department of Labor	30 C.F.R. § 47.73	For a hazardous chemical produced at the mine, the operator must provide customers, upon request, with the chemical's label or a copy of the label information, and the chemical's MSDS.
Manufacturers of Filled Fiber Optic Cables	7 C.F.R. § 1755.900	For initial acceptance, the manufacturer must submit . . . OSHA MSDS for all components.
Manufacturers of Outside Plant Housings and Serving Area Interface (SAI) Systems	C.F.R. § 1755.910	For initial acceptance the manufacturer shall . . . Provide OSHA MSDS for the product

Affected Party	Federal Citation	Federal Mandate
Manufacturers of Products requiring special labeling	16 C.F.R. § 1500.14	Where appropriate, more detailed information that relates to chronic hazard(s), such as physical properties, decomposition products, detailed safety instructions, or disposal recommendations, shall be included in supplemental documents, such as Material Safety Data Sheets, technical brochures, technical data sheets etc.
Manufacturer of Cleaning Solvent	40 C.F.R. § 63.750	Vapor pressure determination. The composite vapor pressure of hand-wipe cleaning solvents used in a cleaning operation subject to this subpart shall be determined as follows: (1) For single-component hand-wipe cleaning solvents, the vapor pressure shall be

Affected Party	Federal Citation	Federal Mandate
		determined using MSDS or other manufacturer's data, standard engineering reference texts, or other equivalent methods
Vendors to Federal Government	41 C.F.R. § 101-42.202	Federal Acquisition Regulation require that manufacturers identify and document potential hazards on material safety data sheets (MSDS's) as part of the acquisition process
Transporters of hazardous material for the federal government between agencies	41 C.F.R. § 101-42.207	Excess hazardous materials may be transferred among Federal agencies under § 101-43.309-5, except that the Standard Form shall contain a complete description of the actual or potential hazard associated with the handling, storage, or use of the item. Such description shall consist either

Affected Party	Federal Citation	Federal Mandate
		of a written narrative, complying with the requirements of 29 CFR 1910.1200, in block 13c or as an addendum, or an MSDS.
Holding agencies for Federal Property that is hazardous	41 C.F.R. § 101-42.302(a)	Holding agencies shall be responsible for the identification and reporting of hazardous materials as set forth in §§ 101- 42.202 and 101-42.203.
State Agencies transferring property with the Federal Government	41 C.F.R. § 101-42.302(b)	State agencies shall prepare Standard Form (SF) 123, Transfer Order Surplus Personal Property, under § 101-44.4901-123-1. A full description of the actual or potential hazard associated with handling, storage, or use of the item must be made available by providing an MSDS.
Department of Homeland	46 C.F.R.	A material safety data sheet (MSDS)

Affected Party	Federal Citation	Federal Mandate
Security employees that handle Benzene	§ 197.565(a)	addressing benzene must be made available to all persons involved in the benzene operation.
Testers of vehicle emissions	40 C.F.R. § 79.61(8)(i)	It is mandatory that the upper explosive limit (UEL) and lower explosive limit (LEL) for the fuel and/or fuel additive(s) that are being tested be determined. These limits can be found in the material safety data sheets (MSDS) for each substance and in various reference texts.
Generators of the EPS USFRS XL Project	40 C.F.R. § 266.402(c)	USFRS will provide the person with a copy of the USFRS XL waste MSDS, FPA and training module
Debris treaters for hazardous debris	40 C.F.R. § 268.45	Debris treaters should refer to the safety precautions specified in Material Safety Data Sheets

Affected Party	Federal Citation	Federal Mandate
Any person submitting a written request under the EPA Community right-to-know program	40 C.F.R. § 370.30(a)(2)	Any person may obtain an MSDS with respect to a specific facility by submitting a written request to the committee.
All personnel involved in the chemical analysis of water and wastewater under Clean Water Act; the Resource Conservation and Recovery Act; the Comprehensive Environmental Response, Compensation, and Liability Act	40 C.F.R. Pt. 430, App. A	A reference file of material safety data sheets (MSDSs) should be made available to all personnel involved in the chemical analysis
All personnel involved in the chemical analysis of NAF for crude oil contamination	40 C.F.R. Pt. 435, Subpt. A, App. 5	A reference file of material safety data sheets (MSDSs) shall be available to all personnel involved in these analyses.
Those determining the concentration of Hazardous Air Pollution	40 C.F.R. § 63.1292	The concentration . . . be determined using . . . material safety data sheets.

Affected Party	Federal Citation	Federal Mandate
Chemists monitoring vapor-phase mercury (Hg) emissions in combustion flue gas streams, using a sorbent trap monitoring system	40 C.F.R. Pt. 75, App. K	Chemists should refer to the Material Safety Data Sheet (MSDS) for each chemical used.
All personnel on a deepwater port	33 C.F.R. § 150.625	Each deepwater port must have a hazard communication program (HCP) available for the training of, and review by, all personnel on the deepwater port. The program must be in writing and describe or include . . . A material safety data sheet (MSDS) for the material.
Oil carriers	33 C.F.R. § 155.1035(j)(10)	Appendices for vessel-specific information . . . must include for each vessel covered by the plan the following information . . . Location of information on the name, description,

Affected Party	Federal Citation	Federal Mandate
		physical and chemical characteristics, health and safety hazards, and spill and firefighting procedures for the oil cargo aboard the vessel. A material safety data sheet meeting the requirements of 29 CFR 1910.1200, cargo information required by 33 CFR 154.310, or equivalent will meet this requirement.
All facilities that could reasonably be expected to cause significant and substantial harm to the environment	33 C.F.R. § 154.1035	Appendices for the response plan . . . must include for each vessel covered by the plan the following information . . . Location of information on the name, description, physical and chemical characteristics, health and safety hazards, and spill and firefighting procedures for the oil cargo aboard the

Affected Party	Federal Citation	Federal Mandate
		vessel. A material safety data sheet meeting the requirements of 29 CFR 1910.1200, cargo information required by 33 CFR 154.310, or equivalent will meet this requirement.